

## CLAIMS

1. A magnetic memory device constructed as a magnetic random access memory, said magnetic memory device comprising:
  - 5 a memory element having by laminating a magnetization pinned layer in which the orientation of magnetization is pinned and a magnetic layer in which the orientation of magnetization is changeable, and
  - a magnetic shield layer for magnetically shielding said
  - 10 memory element,
  - wherein said memory element is characterized by being disposed avoiding an edge portion and a center portion of said magnetic shield layer.
- 15 2. A magnetic memory device comprising:
  - a memory element having a magnetic layer capable of being magnetized, and
  - a magnetic shield layer for magnetically shielding said
  - memory element,
  - 20 wherein said memory element is characterized by being disposed avoiding an edge portion and a center portion of said magnetic shield layer.
3. A magnetic memory device according to claim1 or claim2,
  - 25 wherein said memory element is disposed in a region between a position at  $0.1 L$  inward from one side of said magnetic shield layer and a position at  $0.15 L$  outward from the center of said magnetic shield layer toward one side thereof, where
  - a length from one side of said magnetic shield layer to an
  - 30 opposed side thereof is  $L$ .

4. A memory device according to claim 3,  
wherein said memory element is disposed in a region between  
a position at  $0.2 L$  inward from said one side and a position  
5 at  $0.15 L$  outward from the center of said shield layer toward  
said one side thereof, where said magnetic shield layer is  
provided on both sides of said memory element, and a distance  
between said magnetic shield layers, a length from said one  
side of said magnetic shield layer to the opposed side thereof,  
10 and an external magnetic field to be applied are constant  
respectively.

5. A memory device according to claim 3,  
wherein said memory element is disposed in a region between  
15 a position at  $0.1 L$  inward from said one side thereof and a  
position at  $0.2 L$  outward from the center of the shield layer  
toward said one side thereof, where a distance between said  
magnetic shield layers, a thickness of said magnetic shield  
layers, and an external magnetic field to be applied are  
20 constant respectively.

6. A memory device according to claim 1 or claim 2,  
wherein said magnetic shield layer is disposed on the top  
and/or bottom of a package having by sealing said memory  
25 element therein, or/and on the upper portion and/or the lower  
portion of said memory element within said package.

7. A memory device according to claim 6,  
wherein said memory element is present almost all over said  
30 package.

8. A memory device according to claim 1 or claim 2, wherein said magnetic shield layer is in the form of a flat film or plate, or having concave and/or convex portions thereon, or through-holes such as mesh or slits.

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9. A memory device according to claim 6, wherein said magnetic shield layer is formed of soft magnetic material that exhibits saturation magnetism at 1.8 tesla or more.

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10. A memory device according to claim 1, wherein said memory device is constructed such that an insulating material layer or a conductive material layer is sandwiched between said magnetization pinned layer and said magnetic layer, that with a magnetic field induced by passing a respective current through wirings provided on the top and the bottom of said memory element, the orientation of magnetization in said magnetic layer is aligned in a prescribed direction thereby writing information thereto, and that said written information is read out by use of the tunnel magnetoresistance effect between said wirings.

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